UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,726	10/24/2001	Kenneth Y. Ogami	CYPR-CD01171M	2851

7590 12/13/2004	EXAMINER
WAGNER, MURABITO & HAO LLP	SIEK, VUTHE

WAGNER, MURABITO & HAO LLP
Two North Market Street, Third Floor
San Jose, CA 95113

ART UNIT	PAPER NUMBER
2825	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 October 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-41</u> is/are pending in the application.

   4a) Of the above claim(s) <u>38-41</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) <u>1-41</u> are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 February 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>10/8/04</u> .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to application 10/002,726 and Preliminary

Amendment filed on 2/3/2003. Claims 1-41 remain pending in the application.

Election/Restrictions

2.   Restriction to one of the following inventions is required under 35 U.S.C. 121:

I.   Claims 1-37, drawn to a method/a computer readable medium/system for

configuring a microcontroller, classified in class 716, subclass 17.

II.   Claims 38-41, drawn to a computer implemented graphical user interface,

classified in class 345, subclass 661.

1.   Inventions I and II are related as process and apparatus for its practice. The

inventions are distinct if it can be shown that either: (1) the process as claimed can be

practiced by another materially different apparatus or by hand, or (2) the apparatus as

claimed can be used to practice another and materially different process. (MPEP §

806.05(e)). In this case the process as recited in the invention I could have produced

by another apparatus such CAD tool other than the GUI as in the invention II.

3.   Because these inventions are distinct for the reasons given above and have

acquired a separate status in the art as shown by their different classification, restriction

for examination purposes as indicated is proper.

4.   During a telephone conversation with Mr. Anthony Murabito (35,295) on 12/8/04

a provisional election was made without traverse to prosecute the invention of Group I,

claims 1-37. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 38-41 are withdrawn from further consideration by the examiner,

37 CFR 1.142(b), as being drawn to a non-elected invention. Applicant is requested to

cancel claims 38-41 as non-elected claims in the next communication.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed
publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

6.   Claims 1-2, 4-11, 13-23, 25-31 and 33-37 are rejected under 35 U.S.C. 102(a/e)

as being anticipated by Barnett et al. (6,223,144).

7.   As to claims 1, 11, 22 and 30, Barnett et al. teach a microcontroller software tool

for selecting available hardware configurations of hardware resources of a

microcontroller for producing a modular configuration of selected hardware

configurations and software development environments of a microcontroller by

accessing a description of hardware resources of the microcontroller (Figs. 1B and 2

and its description; col. 5-6). Barnett et al. teach that the microcontroller software

testing tool comprises of a configuration core (configuration core of a microcontroller),

and additional Dynamic Link Libraries that interface the tool to selected hardware

configurations (selected hardware configurations of microcontrollers or selected

configurations of dynamically configurable blocks to produce a variety of functions).

This would explicitly imply that Barnett et al. teach configuring a microcontroller

including generating configuration information corresponding to a selected

configuration.

8.   As to claims 2, 23 and 31, Barnett et al. teach the description of the hardware

resources comprising a text readable data structure (col. 5-6).

9.   As to claims 4-5, 13-14, 25-26 and 33-34, Barnett et al. teach selected

configurations and software development environments to prove a modular

configuration (col. 5-6) (predetermined configurations that are user modules to produce

the selected configuration).

10.   As to claims 6, 15, 27 and 35, Barnett et al. teach the DLL contains all

microcontroller specific information (instruction set) and hardware characteristic to

configure a microcontroller (col. 6).

11.   As to claim 7-8, 16-17, 28-29 and 36-37, Barnett et al. teach application

programming interface calls for embedded software (col. 5), wherein the application

programming interface calls are named according to names given to configurations of

the hardware resources (Figs. 2B-2D).

12.   As to claims 9 and 18, Barnett et al. teach generating an interrupt vector table for

use by embedded software, wherein a plurality of interrupts in the interrupt vector table

are generated by the selected configuration (Fig. 2C).

13.   As to claim 10, Barnett et al. teach using microcontroller software testing tool for

tracking the selected configuration (tracking the selected configuration and informing

user) (col. 5-6) and informing a user if the selected configuration is achievable using the

hardware resources is inherently included within the process.

14.   As to claims 19-21, Barnett et al. teach viewing (editing description) to reflect

changes in configurations and adding a file to directory for using in a new configurations

of a microcontroller (directory file, Fig. 2D).

Claim Rejections - 35 USC § 103

15.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16.   Claims 3, 12, 24 and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Barnett et al. (6,223,144) in view of Zizzo (6,578,174).

17.   As to claims 3,12, 24 and 32, Barnett et al. does not explicitly teach the text

readable data structure is substantially compliant with extensible markup language

(XML). Zizzo teaches a method and system for chip design using remotely located

resources comprising circuit design platform to facilitate the design of an IC by making it

easier for designers to locate and incorporate available virtual component blocks into

new designs include using a universal data interface format or mark-up language (XML)

is preferably used as a primary data interface between the various components of the

system and the details XML are well-known to those in the art of computer programming

(col. 7, 9). Therefore, it would have obvious to one of ordinary skill in the art at the time

the invention was made to implement the description of hardware resources with

extensible markup language (XML) because its universal data format, the XML

language would be easy to implement and preferably used as primary data interface

between various components (EDAs) of the design platform.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Vuthe Siek whose telephone number is (571) 272-1906.

The examiner can normally be reached on Increase Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Vuthe Siek

VUTHE SIEK
PRIMARY EXAMINER